

## SolarTech Power Solutions

# Phase change energy storage in solar power generation



## Overview

---

Certain solar input conditions and load cases are applied to the phase change storage system model and the size and geometry of the solar thermal storage system are determined from this analysis.

Certain solar input conditions and load cases are applied to the phase change storage system model and the size and geometry of the solar thermal storage system are determined from this analysis.

PCESMs are employed in the construction industry for passive solar heating, thermal regulation, and energy-efficient building designs. They facilitate effective thermal dissipation in electronics, hence, improving the efficiency and durability of electronic devices.

Infinia, under the Baseload CSP FOA, developed and demonstrated a subscale system for baseload CSP power generation using thermal energy storage (TES) in a unique integration of innovative enhancements that improves performance and reduces cost.

Today it is well recognised that concentrated solar power (CSP) is a unique renewable energy for electricity generation due to its capability to provide dispatchable electricity [1]. To do so, CSP plants incorporate thermal energy storage (TES).

An effective method of storing thermal energy from solar is through the use of phase change materials (PCMs). PCMs are isothermal in nature, and thus offer higher density energy storage.

## Phase change energy storage in solar power generation

---

### Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://www.zegrzynek.pl>